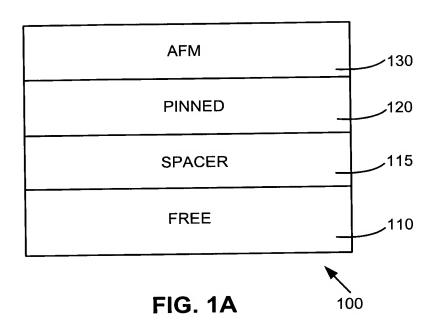
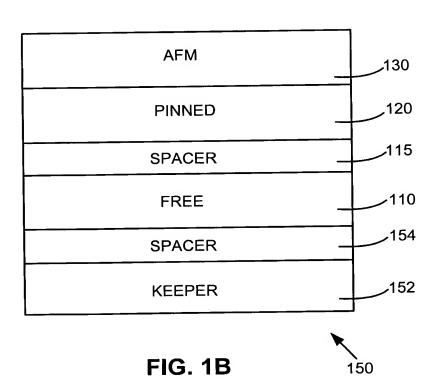
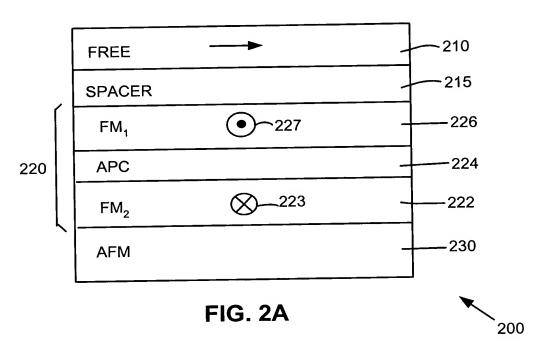
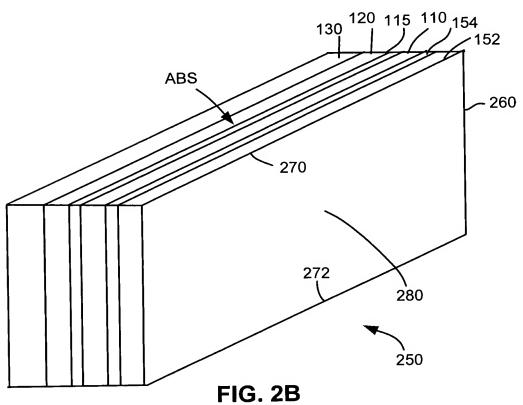
1/11 Hardayal S. GILL HIT1P026/HSJ9-2003-0145US1 (RF)





2/11 Hardayal S. GILL HIT1P026/HSJ9-2003-0145US1 (RF)





3/11 Hardayal S. GILL HIT1P026/HSJ9-2003-0145US1 (RF)

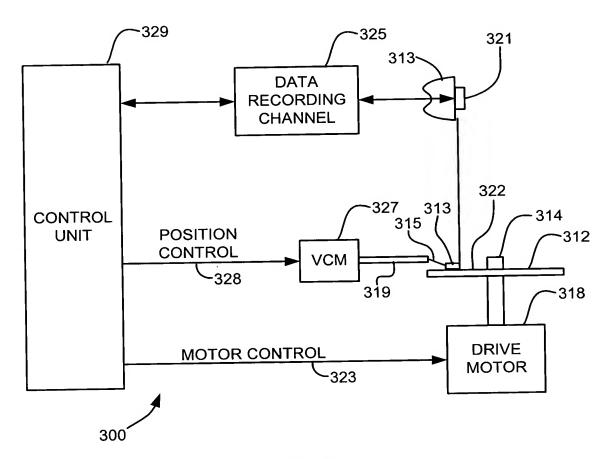
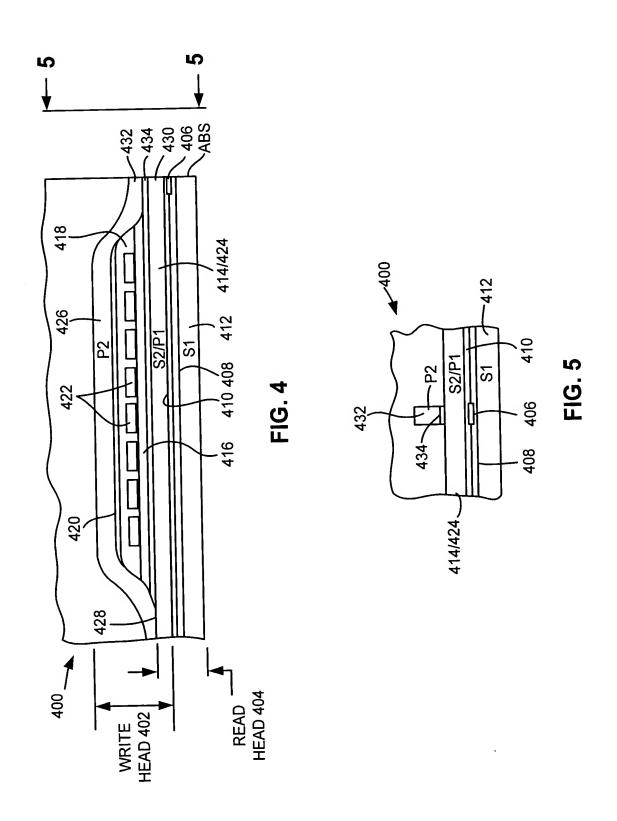
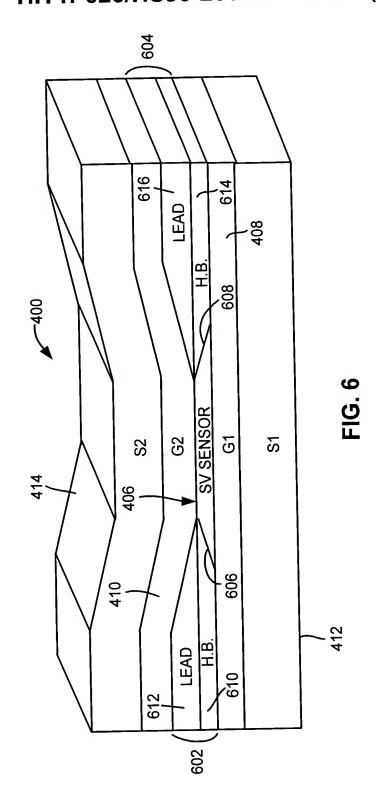


FIG. 3

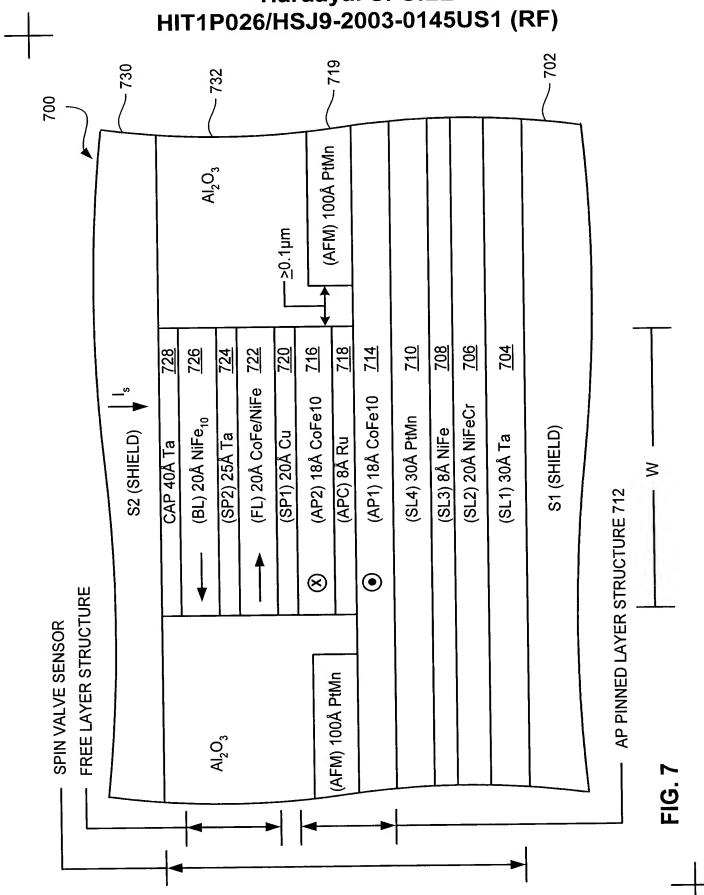
4/11 Hardayal S. GILL HIT1P026/HSJ9-2003-0145US1 (RF)



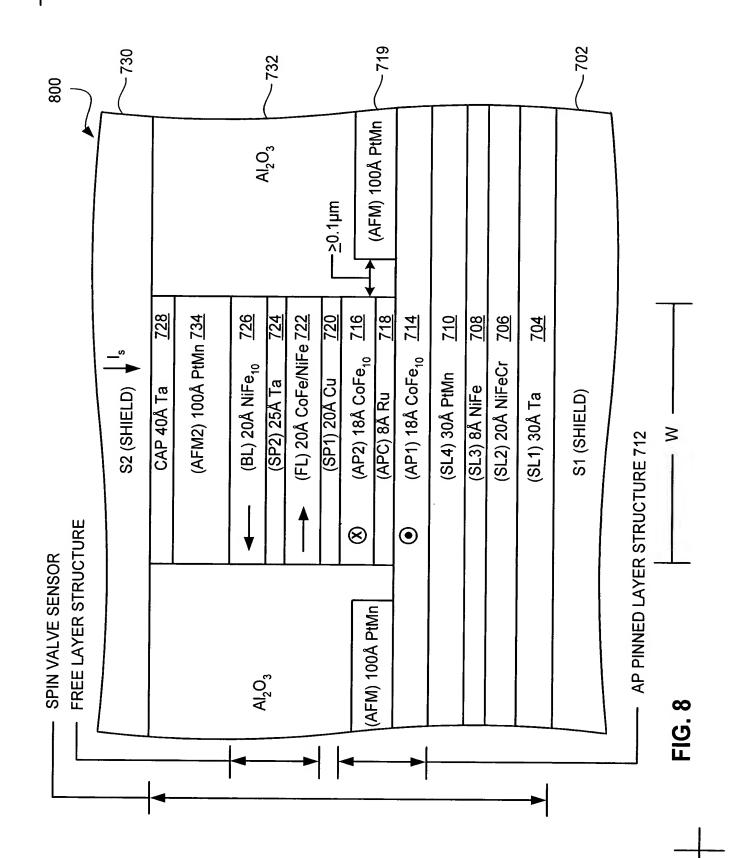
5/11 Hardayal S. GILL HIT1P026/HSJ9-2003-0145US1 (RF)



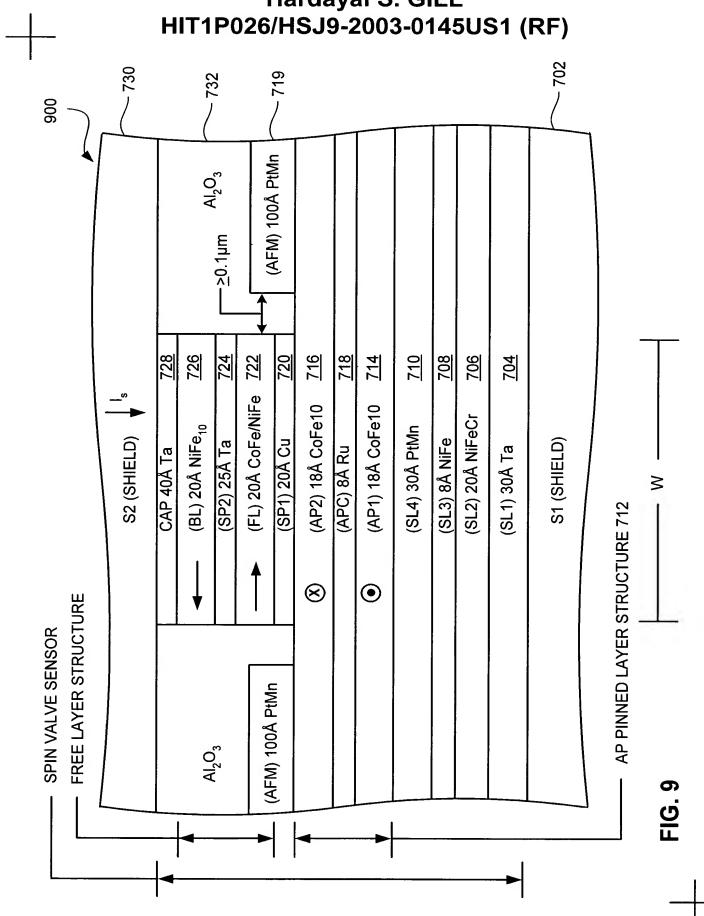
6/11 Hardayal S. GILL HIT1P026/HSJ9-2003-0145US1 (RF)



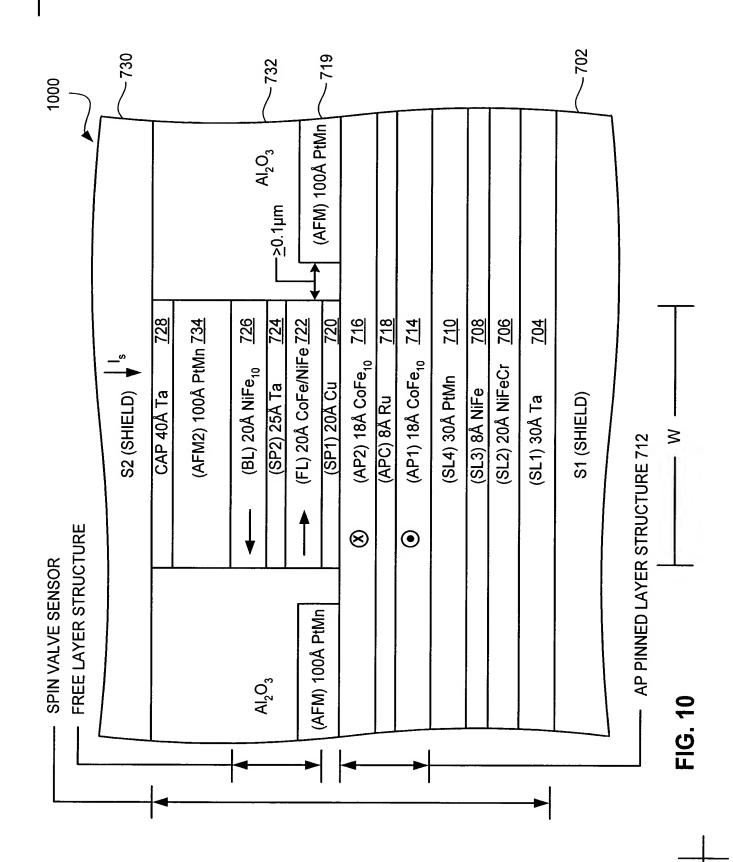
7/11 Hardayal S. GILL HIT1P026/HSJ9-2003-0145US1 (RF)



8/11 Hardayal S. GILL HIT1P026/HSJ9-2003-0145US1 (RF)



9/11 Hardayal S. GILL HIT1P026/HSJ9-2003-0145US1 (RF)



10/11 Hardayal S. GILL HIT1P026/HSJ9-2003-0145US1 (RF) - 702 - 730 719 - 732 1100 (AFM) 100Å PtMn Al_2O_3 -≥0.1µm 716 718 726 720 714 710 724 722 708 <u>706</u> 704 (FL) 20Å CoFe/NiFe (AP2) 18Å CoFe10 (AP1) 18Å CoFe10 (SL2) 20Å NiFeCr (BL) 20Å NiFe₁₀ (SL4) 30Å PtMn (SP1) 5Å Al₂O₃ S2 (SHIELD) (SL3) 8Å NiFe (SP2) 25Å Ta S1 (SHIELD) CAP 40Å Ta (APC) 8Å Ru (SL1) 30Å Ta ≥ AP PINNED LAYER STRUCTURE 712 • 8 FREE LAYER STRUCTURE SPIN VALVE SENSOR (AFM) 100Å PtMn AI_2O_3

11/11 Hardayal S. GILL HIT1P026/HSJ9-2003-0145US1 (RF)

